

ABSTRACT OF THE DISCLOSURE

A method of treating living mammals including humans uses x-rays to disrupt DNA in malfunctioning cells such as cancerous or tumorous cells. A compound comprising a pre-selected element is administered to the mammal so that the compound associates with DNA. Then a localized region of cells which contains the malfunctioning cells is irradiated with line emission x-rays of an energy selected to cause emission of Auger electrons from the pre-selected element of the compound to disrupt DNA proximate to the irradiated pre-selected element. A kit useful for the treatment comprises an x-ray tube capable of emitting monochromatic line emission x-rays and a compound which associates with DNA and has an element which when irradiated emits said Auger electrons.